



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

ASSISTANT ADMINISTRATOR  
FOR ENFORCEMENT AND  
COMPLIANCE ASSURANCE

DEC 18 2008

Mr. Bill Oldland  
Gypsy Moth EIS Team Leader  
USDA Forest Service  
180 Canfield Street  
Morgantown, WV 26505

Dear Mr. Oldland:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) has reviewed the U.S. Department of Agriculture's (USDA's) Draft Supplemental Environmental Impact Statement (SEIS) for Gypsy Moth Management in the United States: A Cooperative Approach (CEQ # 20080353).

The USDA Forest Service (USFS) and Animal and Plant Health Inspection Service (APHIS) are joint lead agencies for the management of gypsy moth (*lymantria dispar*) infestations in the United States. Gypsy moth outbreaks can cause millions of dollars of damage to forested areas used for timber production, recreation, promoting good water quality and water retention, impacts to the habitat of forest flora and fauna as well as impacts on human health. Certain gypsy moth management techniques also have the potential to adversely impact human health, water quality, and forest flora, fauna and habitat.

Under the 1996 Record of Decision (ROD) for gypsy moth management, three complementary strategies were selected and implemented on federal lands: suppression, eradication, and Slow-the-Spread (STS). These strategies are to be used in combination to address the full spectrum of gypsy moth populations found in the United States. The strategies complement one another by having different objectives and are used in various geographic locations and timeframes. In addition, the Gypsy Moth Management Program supports an integrated pest management approach that includes planning, detection, evaluation, monitoring, defining acceptable damage, and using appropriate management practices to prevent or control gypsy moth-caused damage and losses.

Since that time, new treatments have proven to be safer, more cost-efficient, easier to use, and often more effective than older treatments. To provide land managers with more

flexibility in conducting suppression, eradication, and STS projects, the current draft SEIS proposes adding new treatment options that were not available in 1996. Specifically, the draft SEIS evaluates the use of the pesticide Tebufenozide, a new active ingredient and insect growth regulator which is very effective in managing gypsy moth populations, and it also evaluates allowing the addition of the new chemicals or biopesticides that will be developed for managing the gypsy moth to the current control program. The draft SEIS evaluates three alternatives: Alternative 1 - No Action- maintain the 1996 ROD and the current conventional chemical pesticides Dichlorvos (DDVP) and Diflubenzuron (DFB) approved for the Gypsy Moth Management Program; no new treatments would be added. Alternative 2 - allow the use of Tebufenozide; and Alternative 3 (Preferred Alternative) – allow the use of Tebufenozide and add other new treatments upon USDA's finding that the treatment poses no greater risks to human health and non-target organisms than are disclosed in the draft SEIS for the currently approved treatments and Tebufenozide.

While Alternative 3 would expedite access to new management treatments, the draft SEIS is not clear on whether the added treatments will be limited to the use of EPA approved pesticides. Accordingly, the final EIS should discuss whether the new treatment strategies will involve only EPA registered biopesticides and/or conventional chemical pesticide products that are applied as the approved label directs. If non-labeled uses are proposed, or if non-registered pesticides are intended for use, then the USFS/APHIS must apply for a Section 18 Exemption for the specific chemical(s) and use(s) proposed pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Any other control strategies (not involving the use of pesticides) may be amenable to a Human Health and Environmental Risk Assessment, (HHERA), as proposed under Alternative 3, but would need to be evaluated on a case-by-case basis.

Both the peer reviewed literature and EPA data indicate that there is potential for impacts to non-target species, particularly when Tebufenozide is applied by an air blast sprayer off-site contamination may occur from spray drift. Risk assessment data indicate that Tebufenozide has moderate to high toxicity to certain aquatic species, particularly crustaceans in the Order Cladocera (including *Daphnia magna* and others), the bivalve mollusc Eastern oyster (*Crassostrea virginica*), and potentially algae (*Scenedesmus subspicatus*). Additionally, the product label for Mimic 21v (active ingredient Tebufenozide) which is the formulation approved for forestry use and proposed under Alternatives 2 and 3, carries an Environmental Hazard Statement indicating that it is toxic to aquatic invertebrates. In addition to aquatic invertebrates, the draft SEIS identifies the potential for adverse impacts to non-target moth and butterflies (Lepidopterans), especially in Spring and the potential for unintended impacts to water quality.

The draft SEIS states that mitigation measures will be developed and implemented on a site-specific basis for each project, based on local conditions and concerns. In light of the above concerns, EPA recommends that the final EIS include examples of the more widely implemented site specific measures. For example, we recommend that the final EIS further discuss the issue that large-scale areal applications of Tebufenozide to forested areas that contain streams and ponds, and what measures can be used to prevent widespread risk of toxicity to aquatic invertebrates. Current methods that can mitigate exposure to non-target

aquatic organisms include avoiding applications to open water bodies and the establishment of buffer areas to minimize the effects of spray drift. Further we recommend that Tebufenozide use be prohibited in geographic areas known or suspected to be habitats for threatened or endangered Lepidopteran species.

Based on data contained in EPA databases, Tebufenozide is practically non-toxic non-toxic to adult honey bees on a contact basis. However, there is little data available regarding the potential effects on honey bee brood and given the significant decline in wild honey bees, the potential for additional stress to an insect as important as the honey bee may warrant additional consideration. With this in mind, we suggest the final SEIS consider selective monitoring of honey bee populations near specific projects.

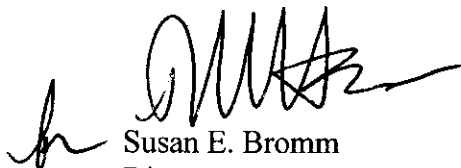
On a matter related to the calculation of the Hazard Quotient and levels of acceptable risk, the Hazard Quotients (HQs) used in the draft are equivalent to the Risk Quotients (RQs) calculated by EPA's Office of Pesticide Programs to support our pesticide risk assessments. Table 1 in draft SEIS (Summary, Vol I of IV, p. 12) should specify the species from which the most sensitive end point was used for HQ calculation. In addition, Table 1 did not address potential effects on non-target Lepidopterans and non-Lepidopteran insects. These effects should be included in final SEIS.

Based on the potential for adverse impacts to aquatic invertebrates, water quality and non-target Lepidopterians, EPA has rated the Draft SEIS as Environmental Concerns and Insufficient Information (EC-2). The detailed descriptions of our EIS ratings are presented in the enclosure.

The final SEIS should include a summary of the measures that will be used to ensure that Environmental Justice issues have been considered and that minority or low income groups located in or adjacent to areas will not be adversely impacted pursuant to Executive Order 12898.

EPA appreciates the opportunity to provide comments on the draft SEIS for Gypsy Moth Management in the United States. If you have questions or comments I can be reached at (202) 564 5400 or please call Elaine Suriano of my staff at (202) 564 7162.

Sincerely,

A handwritten signature in black ink, appearing to read 'Susan E. Bromm', is written over a horizontal line.

Susan E. Bromm  
Director  
Office of Federal Activities

Enclosure

## SUMMARY OF EPA RATING SYSTEM

### Rating the Environmental Impact of the Action

- **LO (Lack of Objections)** The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- **EC (Environmental Concerns)** The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.
- **EO (Environmental Objections)** The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:
  1. *Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;*
  2. *Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;*
  3. *Where there is a violation of an EPA policy declaration;*
  4. *Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or*
  5. *Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.*
- **EU (Environmentally Unsatisfactory)** The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:
  1. *The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;*
  2. *There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or*
  3. *The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.*

### Adequacy of the Impact Statement

- **Category 1 (Adequate)** The draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- **Category 2 (Insufficient Information)** The draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the final EIS.
- **Category 3 (Inadequate)** The draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS.